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Feed Outlook

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U.S. Corn Production and Exports Down This Month

Feed Chart Gallery will be updated on January 21, 2015

The next release is February 11, 2016

Approved by the World Agricultural Outlook Board.

Corn production for 2015/16 is estimated at 13.6 billion bushels, down 52 million from last month's forecast. Partly offsetting are higher projected imports, raised 10 million bushels. Corn use for sweeteners is projected down 10 million bushels and export prospects are cut 50 million. With use reduced more than supply, projected ending stocks are increased modestly and the season-average farm price is down 5 cents to $3.60 per bushel at the midpoint of the projected range. U.S. corn exports face increased competition from increased exports from Argentina, Brazil, Ukraine, and even Mexico. South Africa's forecast corn production is reduced sharply by early season drought. While global corn stocks are projected lower this month, they remain record large, with more than half located in China.

Recent *Feed Outlook* Special Articles

"Boutique Brews, Barley, and the Balance Sheet," pdf pages 18-23 of the January 2015 *Feed Outlook* report (http://www.ers.usda.gov/publications/fds-feed-outlook/fds-15a.aspx).

"World Corn Use Expands Despite High Prices in 2012/13," pdf pages 17-22 of the June 2013 *Feed Outlook* report (http://www.ers.usda.gov/publications/fds-feed-outlook/fds-13f.aspx).

"Animal Unit Calculations—First Projections for the 2013/14 Crop Year," pdf pages 25-30 of the May 2013 *Feed Outlook* report (http://www.ers.usda.gov/publications/fds-feed-outlook/fds-13e.aspx).

Domestic Outlook

Feed Grain Production Lowered

The January 12 *Crop Production 2015 Summary* from USDA's National Agricultural Statistics Service (NASS) pegged feed grain production for 2015/16 1.25 million metric tons lower than the previous forecast at 366.6 million tons. Lower estimated corn production is only partly offset by a small increase in sorghum production. With small but offsetting increases to imports this month, total feed grain supplies decline nearly 1 million tons. At 416.7 million tons, 2015/16 supplies remain record high and up 0.5 percent from 2014/15.

Feed grain disappearance projections for 2015/16 include a 0.25-million-ton reduction in food, seed, and industrial (FSI) use to 173.9 million tons and a 1.2-million-ton reduction in projected exports to 51.7 million tons. This month's projection of total disappearance is lowered 1.5 million tons to 366.3 million, down 1.3 metric tons from the previous year.

Feed and Residual Use Projected Slightly Higher for 2015/16

On a September-August basis, 2015/16 U.S. feed and residual use for the four feed grains plus wheat is projected to total 145.2 million tons, 1.2 million less than last month's forecast and 1.78.million above the adjusted total of 143.4 million for 2014/15. Corn is estimated to account for 92 percent of feed and residual use in 2015/16, compared with 94 percent in 2014/15, as increases in expected sorghum, wheat, and barley feed and residual use on the September-August year reduce corn's share of the total slightly.

The projected index of grain-consuming animal units (GCAU) for 2015/16 is 93.42 million units, down from 94.60 in November but higher than the adjusted 92.60 million units in 2014/15. Feed and residual per GCAU is estimated at 1.55 million tons, nearly the same as in 2014/15. In the index components, GCAUs are lowered this month for poultry and cattle on feed and unchanged for dairy.

Corn Yield Forecast Lowered

The NASS *Crop Production 2015 Summary* indicates a yield reduction of 0.9 bushels per acre to 168.4 bushels for the 2015/16 corn crop. NASS also forecast harvested acreage 85,000 higher for production of 13,601 million bushels. Of the major producing States, the largest yield increases were in Minnesota, Iowa, Kentucky, and South Dakota. Yields declined in Missouri, Indiana, Illinois, and Ohio.

Reduced production, combined with a 10-million-bushel increase in projected imports and a fractional reduction in beginning stocks, places corn supplies for 2015/16 at 15,372 million bushels, 42 million below last month's forecast. Projected supplies are 107 million bushels below the 2014/15 estimate of 15,479 million.

Total Use Expected Down

Total projected use of 13,570 million bushels is 60 million less than last month. A 50-million-bushel reduction in exports and a 10-million-bushel reduction in corn used for high fructose corn syrup (HFCS) result in the drop in total use. The reduction in corn for HFCS is based on the pace of use this marketing year. HFCS exports are reduced on increased global competition. U.S. corn exports also face stiff competition, with slow export sales and shipments in the first months of 2015/16.

The December 1 corn stocks estimate from the NASS January 12 *Grain Stocks* report confirmed expected feed and residual disappearance of corn during the September-December quarter. Projected feed and residual use for the 2015/16 marketing year is unchanged at 5,300 million bushels.

Corn ending stocks for 2015/16 are projected up 17 million bushels to 1,802 million, the highest since 2005/06.

Corn Price Outlook Lowered to $3.60 per Bushel

The projected range for the 2015/16 season-average corn price received by producers is lowered 5 cents on both ends of the range to $3.30 and $3.90 per bushel, respectively. This puts the midpoint corn farm price at $3.60 per bushel. Corn prices for prompt and deferred delivery have trended down over the last month. Lackluster corn demand is offsetting slightly tighter supplies, leaving limited support for price increases.

Sorghum Supplies up on Higher Yield and Imports

Although estimated sorghum carryin for 2015/16 declined incrementally, an increase in harvested acreage offsets a 1.7-bushel-per-acre decline in yield, supporting a 3-million-bushel increase in estimated production to 597 million bushels. Total supplies of 620 million bushels are 6 million bushels above last month’s projection.

Sorghum Use Unchanged From Last Month; Carryout Higher

There are no changes in projected 2015/16 sorghum disappearance this month. The projected supply increase boosts ending stocks to 65 million bushels, the highest since 2005/06. Estimated ending stocks for 2014/15, at 18 million bushels, were lowered just 5,000 bushels from last month based on the September 1 stocks revision in the *Grain Stocks* report.

The projected sorghum farm price for 2015/16 is lowered 15 cents on the low end and 25 cents on the high end for a range of $3.05 to $3.55 per bushel. The midpoint is $3.30 per bushel, compared with $3.50 per bushel last month. The price of sorghum continues to fall relative to corn, especially in interior markets.

Little Change in Barley Balance Sheet

The barley balance sheet is unchanged this month with the exception of a 2.0-million-bushel increase in projected 2015/16 exports. The higher export projection, combined with an incremental increase in 2015/16 beginning stocks from the *Grain Stocks* report, results in a 2-million-bushel decrease in projected ending stocks. At 95 million bushels, ending stocks for 2015/16 are 16 million higher than the slightly revised 2014/15 carryout.

The projected barley farm price range is raised 10 cents on the low end of the range and unchanged on the high end for a range of $5.00 to $5.50 per bushel, with a midpoint of $5.25 per bushel. Contract prices for malting barley are supportive.

Oats Outlook Steady

With the exception of a 5-cent-per-bushel narrowing of the projected farm price range to $2.10 to $2.30 per bushel, there are no changes in the 2015/16 oats balance sheet. The midpoint of the price range remains $2.20 per bushel. The oats crop is mostly marketed, so no change is made to the midpoint price.

Hay Production up From Last Year but Lower Than Last Projection

NASS's *Crop Production 2015 Summary* provides the first updates for U.S. hay production since the October 2015 *Crop Production* report. All hay production for 2015 is down 4 percent from 2014 and estimated at 134.4 million tons. The revised 2015 figure is down 6 percent relative to the October forecast and reflects downward revisions to both harvested area and yield. The 2015 average all-hay yield is estimated at 2.47 tons per acre, a 0.02-ton-per-acre increase from 2014. Higher yields in the Central Plains account for much of the year-to-year increase in productivity.

The January 12 *Crop Production* report indicates that hay stocks on farms totaled 95.0 million tons on December 1, 2015, up 3 percent from December 1, 2014. Good weather in centrally located States supported increased production and boosted local hay stocks. Nationally, disappearance from May 1, 2015, to December 1, 2015, totaled 74.7 million tons, an 11-percent increase over the 2014 estimate.

NASS's December 30 *Agricultural Prices* report indicated continuing seasonal declines in the all-hay price driven by further declines in prices for alfalfa hay through November. Prices for other hay have actually risen from seasonal lows in August. The November all-hay price was $142 per ton; alfalfa hay was $150 per ton, and other hay was $127 per ton. These prices compare to November 2014 per-ton estimates of $162, $182, and $127, respectively. Of the larger producing States, the largest yield gains were found in Minnesota, Iowa, Kentucky, and South Dakota. The largest declines were found in Missouri, Indiana, Illinois, and Ohio.

Corn Silage Production Slips for 2015/16

The January 12 NASS *Crop Production 2015 Summary* reports corn silage production for 2015/16 down by 1.2 million tons from last year's crop at 126.9 million tons. Area harvested for silage dropped by 150,000 acres to 6.2 million. Yields were 0.3 tons per acre higher, partially offsetting the lower acreage. Silage production per roughage-consuming animal units (RCAU) is 1.81 million per ton, down from 1.89 million per ton in 2014/15.

International Outlook

South Africa's Problems Reduce World Coarse Grain Production

World coarse grain production in 2015/16 is projected down 6.6 million tons this month to 1,261.9 million, with reduced U.S. output compounding a drop in projected foreign production of 5.4 million. South Africa's corn production prospects are cut 4.0 million tons to 8.0 million. Corn planting has been disrupted with drought and excessive heat especially intense in the center and western corn-growing regions. At the end of December, imagery indicates most of the crop has not emerged and likely remains unplanted. Even in the east, with better precipitation and more irrigation, satellite imagery indicates delayed planting progress and poor emergence. Corn planted late suffers from reduced yield potential, but the largest driver of yield potential is weather during pollination and grain fill, which occur during February and March for most of the country. Rainfall typically declines seasonally during mid-to-late March. Projected planted area is reduced 27 percent to 2.2 million hectares and yield prospects are trimmed 9 percent. South Africa's sorghum production prospects are also slashed this month by 37 percent to 0.1 million tons. However, high corn prices in South Africa, especially for white corn, provide some incentive to plant late if timely rains arrive.

Russia's statistical agency published preliminary production numbers for 2015/16, with coarse grain production down 1.7 million tons from previous projections based on harvest data from the Ministry of Agriculture. Rye area and yield are cut, dropping production 1.2 million tons to 2.1 million. Corn and oats production are each reduced 0.5 million tons to 13.0 million and 4.6 million, respectively. However, increased barley yields more than offset a reduction in harvested area, boosting production 0.4 million tons to 17.1 million. There is also a small increase in millet production.

Pakistan's barley production is revised back several years based on recently acquired government statistics indicating lower area and yields. Production for 2015/16 is projected down 77 percent, a drop of 0.2 million tons. Peru's corn production is reduced 0.2 million tons to 1.6 million based on government reports of reduced area and more moderate year-to-year yield growth than previously expected.

Ukraine's 2015/16 coarse grain production projection is increased 0.4 million tons this month to 33.3 million. More corn area has been harvested for grain than expected, boosting production 0.5 million tons to 23.5 million. However, sorghum area is reported lower, cutting production 0.1 million tons to 0.1 million. EU coarse grain production is forecast up 0.2 million tons to 150.7 million due to increased barley yields reported for Denmark and the UK. UK oats production also increased slightly. China's 2015/16 coarse grain production is increased 0.1 million tons to 231.6 million as the latest data from China's National Bureau of Statistics indicates sorghum production up 0.3 million tons to 2.9 million, and barley up 0.2 million to 1.7 million, mostly offset by corn trimmed 0.4 million to 224.6 million. There is a small increase in New Zealand's 2015/16 coarse grain production, with increased barley and corn production offsetting a tiny reduction for oats.

Global Beginning Stocks Reduced Slightly, Supplies Remain Large

World 2015/16 coarse grain beginning stocks are forecast down 0.2 million tons to a still-record-large 243.1 million. Changes to estimated 2014/15 supply and demand were mostly driven by revised production or trade data. The largest reduction is for corn stocks in Pakistan, down 0.5 million tons to 1.1 million. Production is revised lower for 2014/15 and several prior years, cutting estimated stocks. Brazil's 2015/16 beginning corn stocks are also cut 0.5 million tons due to increased 2014/15 exports based on the torrid pace shipped in December 2015 and ships waiting to load at the end of December. Argentina's 2014/15 corn exports are also raised 0.5 million tons this month, but domestic use is trimmed, limiting the reduction in 2015/16 beginning stocks to 0.4 million tons. These reductions are partly offset by increased coarse grain stocks for China, up 0.5 million tons to a record 102.0 million due mostly to increased historical production for barley and sorghum. Also, South Africa's 2014/15 corn imports (May 2014 through April 2015 local year) are raised and exports trimmed, reflecting already relatively tight supplies of white corn, and to a lesser extent, yellow corn. This boosted 2015/16 corn beginning stocks 0.5 million tons. Australia's 2015/16 coarse grain beginning stocks are up 0.3 million tons, as reduced 2014/15 barley exports boost stocks but increased sorghum exports are partly offsetting. Numerous changes for other countries' coarse grain beginning stocks for 2015/16 are small and offsetting.

Foreign coarse grain supplies in 2015/16 are down 5.9 million tons this month to 1,087.8 million, mostly due to reduced production prospects. Moreover, with the U.S. total added, world supplies are down 6.8 million tons this month at 1,505.0 million and are no longer forecast record large, but slightly below the previous year's record.

Projected Use Reduced

Forecast 2015/16 coarse grain global use is cut 4.6 million tons this month to 1,260.3 million, slightly less than the 1,264.9 million estimated for 2014/15. Foreign use prospects are cut 4.4 million tons, accounting for most of the decline. Increased exports from Brazil and Argentina in the Southern Hemisphere for marketing year 2014/15, which appear as imports in 2015/16 in importing countries, shifts the disappearance to the old year. These shifts in local marketing year exports and imports reduce world use for 2015/16 by 2.5 million tons this month (for a more complete explanation, see special article: *World Corn Use Expands Despite High Prices in 2012/13*, June 2013 http://www.ers.usda.gov/media/1225040/fds13fsa.pdf).

Russia's 2015/16 coarse grain consumption is projected down 1.2 million tons to 30.4 million, mostly due to reduced rye supplies. Rye food, seed, and industrial use (FSI) is cut 0.8 million tons to 1.9 million, and rye feed use, previously projected at 0.5 million tons, is cut in half. Projected oats use is reduced 0.5 million tons, with feed use down 0.4 million and FSI trimmed 0.1 million. Increased corn and millet feed use is partly offsetting.

South Africa's 2015/16 coarse grain use is projected down 0.7 million tons to 11.3 million. With a sharp reduction in corn production, corn beginning stocks and imports are raised while export prospects are reduced, leaving domestic use cut 0.7

million tons, with feed use down 0.5 million and FSI projected 0.2 million lower and the same as the previous year.

Pakistan’s 2015/16 coarse grain use is forecast down 0.4 million tons to 5.6 million. With reduced corn beginning stocks, use is reduced 0.2 million, half in feed and half in FSI. Sharply reduced barley production cuts barley use 0.2 million tons, all for FSI. Saudi Arabia’s corn feed use is not expanding as rapidly as previously projected, down 0.3 million tons this month to 3.2 million. With tighter corn beginning stocks Argentina’s corn feed use prospects are trimmed 0.2 million tons. There are small reductions in projected coarse grain use this month for Bolivia, Switzerland, Jamaica, and New Zealand.

China’s coarse grain use in 2015/16 is projected up 0.7 million tons to 235.5 million, boosted by increased feed use of barley and sorghum. There are small increases in projected coarse grain use this month for India, Japan, Nepal, Mexico, and Ukraine.

Large Ending Stocks Prospects Moderated

World coarse grain ending stocks in 2015/16 are projected down 2.2 million tons this month to a still-record-large 244.8 million tons. While U.S. stocks are up 0.6 million tons this month, foreign stocks prospects are down 2.7 million tons to 194.4 million.

Brazil’s 2015/16 corn ending stocks are projected down 1.0 million tons to 7.7 million. The exchange rate increases the relative competitiveness of corn exports. Moreover, with the corn harvest spread through the year, there is less need for holding stocks. Corn exports are raised 0.5 million tons each for the March 2015 to February 2016 marketing year for 2014/15 and the March 2016 to February 2017 marketing year for 2015/16.

South Africa, with sharply reduced corn production, is expected to draw down corn stocks in 2015/16, with projected corn stocks down 0.8 million tons to 0.9 million. A fractional increase in projected sorghum stocks is partly offsetting.

China’s 2015/16 coarse grain ending stocks are forecast down 0.6 million tons to 114.8 million tons. Corn stocks prospects are cut 0.9 million tons due to reductions in expected imports and production. Partly offsetting are increased projected ending stocks of sorghum and barley. China is still expected to hold more than half the world’s corn stocks and just under half of all coarse grain stocks.

Coarse grain ending stocks for 2015/16 are projected lower this month for Russia, down 0.4 million tons; Pakistan, reduced 0.3 million; Argentina and Saudi Arabia, each trimmed 0.2 million; and several other countries with smaller reductions. Increased coarse grain ending stocks are expected for the United States (0.6 million tons), India and Australia (0.3 million each), and some other countries with smaller increases.

U.S. Corn Export Prospects Cut as Brazil’s and Argentina’s Grow

World 2015/16 (October-September) corn trade is projected up 0.5 million tons this month to 128.3 million, up slightly from estimated trade for the previous year.

Corn prices are low enough to generate import demand that is large but not quite as large as the record 2013/14 corn trade that benefitted from pent-up demand from the 2012/13 U.S. drought.

U.S. 2015/16 corn exports are projected down 1.0 million tons this month to 43.5 million tons (down 50 million bushels to 1.7 billion bushels for the September-August local marketing year). The U.S. shipment pace of corn in the early months of 2015/16 has been more like the drought-reduced 2012/13 pace than that of the 2 intervening years. Census data for October and November 2015 added to Inspections for December, reached 6.8 million tons, a drop of 25 percent from the first quarter of 2014/15. Moreover, at the end of December, outstanding export sales reached only 11.1 million tons, also down 25 percent from a year ago. With Brazil's corn exports expected to wane in coming months as port capacity shifts to soybeans, U.S. prices are expected to become more competitive. That has happened compared to Brazil's corn prices, but Argentina's corn export prices have dropped in response to changed policy. However, Argentina corn supplies are limited, and, eventually, U.S. export sales are expected to increase, limiting the year-to-year decline in U.S. exports to only 7 percent.

Brazil's corn exports for trade year 2015/16 are raised 1.0 million tons this month to a record-large 35.0 million. Brazil reported record corn exports of 6.3 million tons in December 2015. Macroeconomic and political problems have kept the exchange rate favorable for exporting. Brazil's corn exports have moved rapidly, even without government subsidies implemented (PEPPRO program) and without the delays and paperwork associated with the government program. However, recent shipments are from the record 2014/15 crop, and with the soybean harvest on the horizon, corn shipments are expected to decline in January and dwindle in February. Corn exports are expected to revive in June-September 2016 with the harvest of second-crop corn, but the 2015/16 crop is not expected to match the previous year's record.

Argentina's trade year 2015/16 corn exports are forecast up 0.5 million tons to 17.5 million. Export taxes and quantitative restrictions on corn exports have been lifted by the new administration. Moreover, the exchange rate has been allowed to float freely, increasing the relative competitiveness of Argentina's corn exports. Corn sales and shipments have picked up in recent weeks, and Argentina's corn prices are now the most competitive. However, until the new crop harvest becomes available (mostly April or later because of delayed planting), corn exports will be constrained by old crop supplies.

Mexico's corn exports are projected up 0.5 million tons to 1.0 million based on recent and expected exports of white corn. With South Africa hurt by drought, demand for Mexico's white corn is strong. However, South Africa's corn export prospects are cut 0.5 million tons to 0.5 million, leaving South Africa a net corn importer.

Ukraine's corn export prospects are increased 0.5 million tons to 15.5 million, the full amount of the production increase. The exchange rate and political-economic situation encourages export of available supplies. However, with Russia's corn production reduced, projected exports are cut 0.2 million tons to 3.8 million. India's corn export prospects are reduced 0.3 million tons to 0.7 million, as strong internal demand and high domestic prices limit exports. There is a small increase in export prospects for Bolivia and a reduction for Guatemala based on trade data.

South Africa’s trade year 2015/16 corn imports are raised 1.2 million tons to 1.7 million, with imports needed to support FSI and limit declines in feed use. However, port logistics for grain imports are expected to be a limiting factor. Mexico’s corn import prospects are increased 0.5 million tons to 11.0 million supported by the strong pace of recent purchases and shipments and increased demand due to exports.

U.S. corn imports are forecast up 0.25 million tons to 1.0 million due to the pace of recent imports. Higher corn prices in the Eastern Corn Belt are expected to continue to encourage imports of South American corn into the East Coast.

Peru’s corn import prospects are up 0.2 million tons to 2.7 million, nearly matching those of the previous year. The increase in imports matches the decline in production.

China’s 2015/16 corn imports are cut 0.5 million tons to 2.5 million, as shipments from Ukraine and other countries able to clear corn through China’s customs have been slower than expected. Saudi Arabia’s corn imports are forecast down 0.5 million tons this month to a still record 3.5 million tons as the shift to corn feed use and away from other grains has been slower than expected.

Changes in projected 2015/16 trade for other coarse grains are insignificant this month.

Contacts and Links

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Data

Feed Grains Database
(http://ers.usda.gov/data-products/feed-grains-database.aspx) is a queryable database that contains monthly, quarterly, and annual data on prices, supply, and use of corn and other feed grains. This includes data published in the monthly Feed Outlook and the annual Feed Yearbook reports.

Related Websites

Feed Outlook
(http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273)
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Tables

Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 1/14/2016

Commodity, market year, and quarter 1/			Beginning stocks	Production	Imports	Total supply	Food, seed, and industrial use	Feed and residual use	Exports	Total disappear-ance	Ending stocks	Farm price 2/ (dollars per bushel)
Corn	2012/13	Sep-Nov	989	10,755	35	11,779	1,466	2,060	221	3,746	8,033	6.87
		Dec-Feb	8,033		45	8,078	1,430	1,087	161	2,678	5,400	6.95
		Mar-May	5,400		40	5,440	1,567	921	186	2,674	2,766	7.04
		Jun-Aug	2,766		40	2,806	1,575	247	162	1,985	821	6.67
		Mkt yr	989	10,755	160	11,904	6,038	4,315	730	11,083	821	6.89
	2013/14	Sep-Nov	821	13,829	15	14,665	1,550	2,312	350	4,212	10,453	4.66
		Dec-Feb	10,453		7	10,459	1,602	1,459	390	3,451	7,008	4.40
		Mar-May	7,008		9	7,017	1,664	865	636	3,165	3,852	4.63
		Jun-Aug	3,852		6	3,858	1,677	404	544	2,626	1,232	4.06
		Mkt yr	821	13,829	36	14,686	6,493	5,040	1,920	13,454	1,232	4.46
	2014/15	Sep-Nov	1,232	14,216	5	15,452	1,615	2,225	401	4,241	11,211	3.57
		Dec-Feb	11,211		6	11,217	1,625	1,438	404	3,467	7,750	3.80
		Mar-May	7,750		10	7,760	1,660	1,111	536	3,307	4,453	3.75
		Jun-Aug	4,453		11	4,464	1,669	541	523	2,733	1,731	3.69
		Mkt yr	1,232	14,216	32	15,479	6,568	5,315	1,864	13,748	1,731	3.70
	2015/16	Sep-Nov	1,731	13,601	13	15,345	1,635	2,195	303	4,134	11,212	3.65
		Mkt yr	1,731	13,601	40	15,372	6,570	5,300	1,700	13,570	1,802	3.30-3.90
Sorghum	2012/13	Sep-Nov	22.95	247.74	1.09	271.78	24.92	79.68	27.34	131.94	139.85	6.86
		Dec-Feb	139.85		0.06	139.91	24.92	4.31	19.15	48.37	91.54	6.76
		Mar-May	91.54		5.52	97.06	25.90	16.46	13.59	55.95	41.11	6.67
		Jun-Aug	41.11		2.91	44.01	19.60	-6.96	16.22	28.86	15.15	5.30
		Mkt yr	22.95	247.74	9.57	280.27	95.34	93.48	76.30	265.11	15.15	6.33
	2013/14	Sep-Nov	15.15	392.33	0.01	407.49	45.00	97.71	33.39	176.10	231.39	4.28
		Dec-Feb	231.39		0.01	231.40	10.00	4.19	41.48	55.67	175.73	4.22
		Mar-May	175.73		0.01	175.74	12.01	2.58	68.72	83.32	92.42	4.68
		Jun-Aug	92.42		0.07	92.49	2.88	-11.92	67.51	58.46	34.03	4.11
		Mkt yr	15.15	392.33	0.09	407.57	69.89	92.56	211.10	373.54	34.03	4.28
	2014/15	Sep-Nov	34.03	432.58	0.21	466.82	10.36	150.23	83.64	244.23	222.59	3.63
		Dec-Feb	222.59		0.12	222.71	2.88	2.62	97.36	102.86	119.86	4.17
		Mar-May	119.86		0.00	119.86	1.05	-17.10	101.63	85.57	34.29	4.41
		Jun-Aug	34.29		0.04	34.33	0.92	-55.30	70.30	15.92	18.41	
		Mkt yr	34.03	432.58	0.38	466.98	15.21	80.44	352.93	448.57	18.41	4.03
	2015/16	Sep-Nov	18.41	596.75	3.60	618.76	22.00	169.50	113.14	304.63	314.13	3.49
		Mkt yr	18.41	596.75	5.00	620.16	100.00	130.00	325.00	555.00	65.16	3.05-3.55

Table 1--Feed grains: U.S. quarterly supply and disappearance, cont. (million bushels), 1/14/2016

Commodity, market year, and quarter 1/			Beginning stocks	Production	Imports	Total supply	Food, seed, and industrial use	Feed and residual use	Exports	Total disappear-ance	Ending stocks	Farm price 2/ (dollars per bushel)
Barley	2012/13	Jun-Aug	60	219	5	284	38	45	3	86	198	6.40
		Sep-Nov	198		6	204	36	6	3	46	158	6.46
		Dec-Feb	158		6	164	35	11	1	47	117	6.44
		Mar-May	117		6	123	38	3	1	42	80	6.42
		Mkt yr	60	219	23	302	147	66	9	222	80	6.43
	2013/14	Jun-Aug	80	217	2	299	40	61	3	103	196	6.22
		Sep-Nov	196		5	201	39	-11	3	31	169	5.98
		Dec-Feb	169		4	173	37	10	4	52	122	6.03
		Mar-May	122		8	129	37	6	4	47	82	5.93
		Mkt yr	80	217	19	316	153	66	14	234	82	6.06
	2014/15	Jun-Aug	82	182	7	271	39	48	4	91	180	5.69
		Sep-Nov	180		4	184	38	-14	4	28	156	5.25
		Dec-Feb	156		6	163	37	5	3	44	118	5.07
		Mar-May	118		6	124	37	4	4	45	79	4.86
		Mkt yr	82	182	24	287	151	43	14	209	79	5.30
	2015/16	Jun-Aug	79	214	4	297	40	35	3	78	219	5.41
		Sep-Nov	219		4	223	39	-0	4	42	181	5.53
		Mkt yr	79	214	17	310	153	50	12	215	95	5.00-5.50
Oats	2012/13	Jun-Aug	55	61	29	146	17	43	0	61	85	3.76
		Sep-Nov	85		27	112	18	21	0	39	73	3.84
		Dec-Feb	73		17	90	17	20	0	38	53	4.02
		Mar-May	53		20	72	24	12	0	36	36	4.35
		Mkt yr	55	61	93	209	76	96	1	173	36	3.89
	2013/14	Jun-Aug	36	65	17	118	17	37	0	55	63	3.72
		Sep-Nov	63		28	91	18	25	1	43	48	3.56
		Dec-Feb	48		20	68	16	16	0	33	35	3.71
		Mar-May	35		32	67	22	20	0	43	25	4.03
		Mkt yr	36	65	97	198	73	98	2	173	25	3.75
	2014/15	Jun-Aug	25	70	27	122	18	30	1	48	74	3.34
		Sep-Nov	74		24	99	18	13	0	32	67	3.16
		Dec-Feb	67		32	99	17	22	0	39	59	3.08
		Mar-May	59		24	84	24	5	0	30	54	2.89
		Mkt yr	25	70	107	202	77	70	2	149	54	3.21
	2015/16	Jun-Aug	54	90	19	162	18	50	0	68	94	2.23
		Sep-Nov	94		26	120	18	19	1	37	83	2.09
		Mkt yr	54	90	95	238	77	100	2	179	59	2.10-2.30

Latest market year is projected; previous market year is estimated. Totals may not add due to rounding.
1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year.
2/ Average price received by farmers based on monthly price weighted by monthly marketings. For the latest market year, quarterly prices are calculated by using the current monthly prices weighted by the monthly marketings for those months for the previous 5 years divided by the sum of marketings for those months.
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Data run: 1/13/2016

Table 2--Feed and residual use of wheat and coarse grains, 1/14/2016

Market year and quarter 1/		Corn (million metric tons)	Sorghum (million metric tons)	Barley (million metric tons)	Oats (million metric tons)	Feed grains (million metric tons)	Wheat (million metric tons)	Energy feeds (million metric tons)	Grain consuming animal units (millions)	Energy feeds per grain consuming animal unit (tons)
2013/14	Q1 Sep-Nov	58.7	2.5	-0.2	0.4	61.4	-4.6	56.8		
	Q2 Dec-Feb	37.1	0.1	0.2	0.3	37.7	-0.0	37.7		
	Q3 Mar-May	22.0	0.1	0.1	0.4	22.5	-0.7	21.8		
	Q4 Jun-Aug	10.3	-0.3	1.0	0.5	11.5	7.0	18.5		
	MY Sep-Aug	128.0	2.4	1.2	1.6	133.2	1.7	134.8	90.4	1.5
2014/15	Q1 Sep-Nov	56.5	3.8	-0.3	0.3	60.3	-2.5	57.8		
	Q2 Dec-Feb	36.5	0.1	0.1	0.4	37.1	0.2	37.3		
	Q3 Mar-May	28.2	-0.4	0.1	0.1	28.0	-1.4	26.7		
	Q4 Jun-Aug	13.7	-1.4	0.8	0.8	13.9	7.8	21.7		
	MY Sep-Aug	135.0	2.0	0.6	1.6	139.3	4.1	143.4	92.6	1.5
2015/16	Q1 Sep-Nov	55.8	4.3	-0.0	0.3	60.4	-1.9	58.4		
	MY Sep-Aug	134.6	3.3	1.3	1.6	140.8	4.4	145.2	93.4	1.6

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year.
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates and supporting materials.

Table 3--Cash feed grain prices, 1/14/2016

Mkt year and month 1/	Corn, No. 2 yellow, Central IL (dollars per bushel)			Corn, No. 2 yellow, Gulf ports, LA (dollars per bushel)			Sorghum, No. 2 yellow, Gulf ports, LA (dollars per cwt)		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
Sep	4.78	3.16	3.55	5.27	4.14	4.22	9.84	7.91	8.08
Oct	4.20	3.09	3.67	5.13	4.15	4.36	9.31	8.52	8.23
Nov	4.10	3.45	3.62	5.06	4.54	4.22	8.86	9.04	7.89
Dec	4.13	3.75	3.62	5.06	4.55	4.17	9.34	9.85	
Jan	4.13	3.67		5.03	4.44		9.77	10.41	
Feb	4.33	3.65		5.32	4.41		10.16	10.70	
Mar	4.64	3.66		5.65	4.43		10.57		
Apr	4.98	3.59		5.65	4.38			9.97	
May	4.72	3.49		5.51	4.23			7.44	
Jun	4.37	3.52		5.14	4.24				
Jul	3.74	3.85		4.64	4.56				
Aug	3.59	3.51		4.48	4.14		8.41	8.09	
Mkt year	4.31	3.53		5.16	4.35		9.53	9.10	
	Barley, No. 2 feed, Minneapolis, MN (dollars per bushel)			Barley, No. 3 malting, Minneapolis, MN (dollars per bushel)			Oats, No. 2 white heavy, Minneapolis, MN (dollars per bushel)		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
Jun	5.01	3.49	2.59	6.88	5.71		4.21	3.88	2.89
Jul	4.66	3.01	2.70	6.79	5.62		3.84	3.85	2.82
Aug	4.03	2.58	2.41	5.88	5.79		3.78	3.83	2.63
Sep	3.48	2.30	2.39	5.41	5.98	4.95	3.40	3.86	2.70
Oct	3.39	2.44	2.57	5.50	7.28	4.95	3.57	3.68	2.58
Nov	3.46	2.48	2.60	5.46	7.35	4.95	3.79	3.53	2.67
Dec	3.52	2.68	2.60	5.77	7.35		3.80	3.49	2.64
Jan	3.65	2.79		5.72	7.10		4.30	3.26	
Feb	3.70	2.73		5.64	6.75		4.64	3.11	
Mar	3.87	2.75		5.97			4.66	3.14	
Apr	3.95	2.81		6.24	6.35		4.58	2.94	
May	3.96	2.76		6.10	6.23		4.03	2.75	
Mkt year	3.89	2.74		5.95	6.50		4.05	3.44	

1/ Corn and sorghum, September 1-August 31 marketing year; Barley and oats, June 1-May 31 marketing year. Simple average of monthly prices for the marketing year.
Source: USDA, Agricultural Marketing Service, http://marketnews.usda.gov/portal/lg.

Data run: 1/13/2016

Table 4--Selected feed and feed byproduct prices (dollars per ton), 1/14/2016

Mkt year and month 1/	Soybean meal, high protein, Central Illinois, IL			Cottonseed meal, 41% solvent, Memphis, TN			Corn gluten feed, 21% protein, Midwest			Corn gluten meal, 60% protein, Midwest		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
Oct	443.63	381.50	327.97	355.00	346.88	292.50	157.50	90.13	96.00	601.25	549.38	509.38
Nov	451.13	441.40	308.60	345.00	313.13	291.88	158.38	105.13	109.63	631.25	581.88	477.50
Dec	498.31	431.74	289.78	401.88	334.38	265.00	168.00	143.30	113.13	638.13	613.50	482.25
Jan	479.54	380.03		378.34	313.75		165.00	135.25		625.00	632.50	
Feb	509.25	370.39		388.75	302.50		167.50	117.25		668.13	631.25	
Mar	497.82	357.83		401.25	310.50		177.63	107.20		744.38	613.00	
Apr	514.01	336.61		405.50	288.13		166.60	83.13		784.00	575.63	
May	519.38	320.23		416.88	274.38		157.00	72.25		761.25	549.38	
Jun	501.72	335.03		412.50	281.00		131.88	74.40		694.50	571.60	
Jul	450.79	375.48		359.50	299.38		113.70	91.25		574.00	560.00	
Aug	490.33	357.85		310.00	295.63		109.25	88.75		572.88	550.63	
Sep	525.72	333.63		360.63	293.50		98.70	95.50		587.50	525.00	
Mkt yr	490.13	368.48		377.93	304.43		147.59	100.29		656.86	579.48	

	Meat and bone meal, Central US			Distillers dried grains, Central Illinois, IL			Wheat middlings, Kansas City, MO			Alfalfa hay, weighted-average farm price 2/		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
Oct	385.53	385.00	291.88	216.50	96.00	123.13	153.37	111.48	105.93	193.00	193.00	156.00
Nov	410.95	383.79	266.25	217.13	113.13	132.63	138.69	106.87	106.53	188.00	182.00	150.00
Dec	459.57	424.22	221.67	220.50	159.30	133.13	198.00	135.83	99.55	186.00	180.00	
Jan	456.88	382.49		200.00	186.50		151.62	140.93		186.00	170.00	
Feb	438.75	370.63		214.38	187.13		150.24	124.85		190.00	167.00	
Mar	501.25	376.00		245.00	189.50		156.62	1,118.55		193.00	169.00	
Apr	560.00	390.63		243.50	191.00		133.38	81.93		207.00	183.00	
May	516.25	368.75		222.75	178.50		131.07	64.25		227.00	192.00	
Jun	506.88	313.50		184.50	157.50		102.43	60.27		224.00	178.00	
Jul	489.83	333.75		148.00	153.50		70.36	77.96		217.00	169.00	
Aug	464.37	388.75		116.88	115.13		81.24	92.72		207.00	159.00	
Sep	435.00	344.00		123.00	139.30		106.62	112.67		197.00	157.00	
Mkt yr	468.77	371.79		196.01	155.54		131.14	185.69		199.00	196.00	

1/ October 1-September 30 except for hay. Simple average of monthly prices for the marketing year except for hay.
2/ May 1-April 30 marketing year. U.S. season-average price based on monthly price received by farmers weighted by monthly marketings.

Source: USDA, Agricultural Marketing Service, http://marketnews.usda.gov/portal/lg, and USDA, National Agricultural Statistics Service, http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats/index.asp.

Table 5--Corn: Food, seed, and industrial use (million bushels), 1/14/2016

Mkt year and qtr 1/		High-fructose corn syrup (HFCS)	Glucose and dextrose	Starch	Alcohol for fuel	Alcohol for beverages and manufacturing	Cereals and other products	Seed	Total food, seed, and industrial use
2013/14	Q1 Sep-Nov	113.44	74.07	62.15	1,215.75	34.59	49.95	0.00	1,549.95
	Q2 Dec-Feb	110.13	74.24	60.77	1,271.14	36.26	49.82	0.00	1,602.36
	Q3 Mar-May	125.28	79.09	51.00	1,298.86	37.93	50.34	21.71	1,664.20
	Q4 Jun-Aug	128.89	80.92	44.84	1,337.94	32.78	50.41	1.22	1,677.00
	MY Sep-Aug	477.74	308.32	218.75	5,123.69	141.56	200.51	22.93	6,493.50
2014/15	Q1 Sep-Nov	116.78	74.64	62.41	1,276.24	34.52	50.11	0.00	1,614.69
	Q2 Dec-Feb	109.87	71.95	59.76	1,297.50	36.18	49.95	0.00	1,625.20
	Q3 Mar-May	123.73	77.29	50.18	1,298.69	37.85	50.47	21.42	1,659.63
	Q4 Jun-Aug	128.08	75.96	43.19	1,336.08	33.64	50.68	1.10	1,668.71
	MY Sep-Aug	478.46	299.83	215.53	5,208.50	142.19	201.21	22.52	6,568.23
2015/16	Q1 Sep-Nov	110.81	72.34	62.30	1,304.06	35.13	50.62	0.00	1,635.26
	MY Sep-Aug	470.00	300.00	230.00	5,200.00	144.00	203.10	22.90	6,570.00

1/ September-August. Latest data may be preliminary or projected.
Source: Calculated by USDA, Economic Research Service.

Table 6--Wholesale corn milling product and byproduct prices, 1/14/2016

Mkt year and month 1/	Corn meal, yellow, Chicago, IL (dollars per cwt)		Corn meal, yellow, New York, NY (dollars per cwt)		Corn starch, Midwest 3/ (dollars per cwt)		Dextrose, Midwest (cents per pound)		High-fructose corn syrup (42%), Midwest (cents per pound)	
	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
Sep	17.32	17.80	18.99	19.47	14.14	14.20	34.50	37.00	21.25	23.25
Oct	17.44	17.96	19.11	19.63	13.30	14.29	34.50	37.00	21.25	23.25
Nov	18.44	17.53	20.14	19.20	12.91	14.95	34.50	37.00	21.25	23.25
Dec	18.89	17.58	20.56	19.25	13.90	14.80	34.50	37.00	21.25	23.25
Jan	18.94		20.61		14.11		37.00		23.25	
Feb	18.71		20.39		13.93		37.00		23.25	
Mar	18.51		20.06		13.90		37.00		23.25	
Apr	17.90		19.57		14.08		37.00		23.25	
May	17.62		19.29		14.50		37.00		23.25	
Jun	17.81		19.48		14.50		37.00		23.25	
Jul	18.40		20.07		14.41		37.00		23.25	
Aug	17.65		19.32		15.37		37.00		23.25	
Mkt year 2/	18.14		19.80		14.09		36.17		22.58	

1/ September-August. Latest month is preliminary.
2/ Simple average of monthly prices for the marketing year.
3/ Bulk-industrial, unmodified.
Source: Milling and Baking News, except for corn starch which is from private industry.

Date run: 1/13/2016

Table 7--U.S. feed grain imports by selected sources (1,000 metric tons) 1/, 1/14/2016

Import and country/region		---------- 2013/14 ----------		---------- 2014/15 ----------		2015/16
		Mkt year	Jun-Nov	Mkt year	Jun-Nov	Jun-Nov
Oats	Canada	1,503	738	1,707	841	754
	Sweden	99	0	72	0	7
	Finland	66	39	62	40	18
	All other countries	6	2	12	5	0
	Total 2/	1,674	779	1,852	886	779
Malting barley	Canada	242	80	334	168	115
	All other countries			28	0	0
	Total 2/	242	80	362	168	115
Other barley 3/	Canada	162	67	147	80	57
	All other countries	4	1	4	2	2
	Total 2/	166	69	151	82	59

1/ Grain only. Market year (June-May) and market year to date.
2/ Totals may not add due to rounding.
3/ Grain for purposes other than malting, such as feed and seed use.
Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Statistics.

Date run: 1/13/2016

Table 8--U.S. feed grain exports by selected destinations (1,000 metric tons) 1/, 1/14/2016

		---------- 2013/14 ----------		---------- 2014/15 ----------		2015/16
Export and country/region		Mkt year	Sep-Nov	Mkt year	Sep-Nov	Sep-Nov
Corn	Japan	11,939	1,749	12,081	2,274	1,638
	Mexico	10,490	2,459	11,289	2,548	2,825
	South Korea	4,961	772	3,944	552	69
	Colombia	3,562	404	4,340	1,148	984
	China (Mainland)	2,732	1,788	612	107	67
	Egypt	2,644	58	1,235	391	124
	China (Taiwan)	1,780	303	1,850	160	177
	European Union-27	1,263	64	361	76	2
	Peru	1,246	150	2,555	862	351
	Venezuela	1,128	236	710	338	196
	Saudi Arabia	1,031	68	1,185	71	0.001
	Guatemala	753	146	852	209	202
	Dominican Republic	596	54	607	78	0.020
	Costa Rica	593	76	774	213	98
	Vietnam	509	62	8	7	
	Canada	479	99	1,489	488	339
	Israel	469		27	10	
	El Salvador	409	94	542	156	129
	Honduras	375	64	428	90	122
	Panama	333	73	450	141	52
	Jamaica	283	44	287	68	52
	Morocco	202		298	30	0.628
	Cuba	137		26		
	Nicaragua	121	11	191	51	36
	Indonesia	116	23	47	12	25
	All other countries	631	101	1,170	116	218
	Total 2/	48,783	8,897	47,359	10,195	7,706
Sorghum	China (Mainland)	4,263	359	8,371	1,860	2,669
	Sub-Saharan Africa	444	226	484	224	102
	Japan	293	115	72	31	16
	Mexico	251	146	21	6	49
	All other countries	112	2	17	4	38
	Total 2/	5,362	848	8,965	2,125	2,874
		---------- 2013/14 ----------		---------- 2014/15 ----------		2015/16
		Mkt year	Jun-Nov	Mkt year	Jun-Nov	Jun-Nov
Barley	Japan	169	39	90	55	2
	Mexico	93	51	100	42	85
	Libya	21	21			
	China (Taiwan)	11	6	32	13	4
	All other countries	17	11	90	50	63
	Total 2/	311	128	312	161	155

1/ Grain only. Market year (September-August for corn and sorghum, June-May for barley) and market year to date.
2/ Totals may not add due to rounding.
Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Statistics.

Date run: 1/13/2016